

THE TECH

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BOSTON, MASS., SATURDAY, NOVEMBER 30, 1907

PRICE THREE CENTS

PHOTOS OF MARS SUPPORT THEORY OF LIFE THERE.

PROF. LOWELL OF INSTITUTE FINDS
MORE EVIDENCE TO THAT EFFECT.

Sent to South America to Get Best Pictures
of Planet.

Professor Percival Lowell, non-resident professor of astronomy at the Institute, founder of the Lowell Observatory at Flagstaff, Ariz., and the leading authority on the planet Mars, returned to Boston Tuesday, bringing with him some remarkable photographs of the neighboring planet.

These photographs were taken at the Lowell Observatory, and by the expedition sent out from the observatory at Alianza, in Chile, South America, and they corroborate the theory of Professor Lowell that Mars is the abode of intelligent life. Transparencies from these photographs have been placed on exhibition in the main hall of Rogers.

In the canal-like markings originally discovered by Schiaparelli, Professor Lowell finds not at all natural diversities of surface, but an artificially constructed irrigation system brought into existence to serve the needs of sentient beings. These canals, linking the polar snow water with the arid region of the equator, appear at springtime when the polar snows have melted; and as the water flows, bands of vegetation spring up, growing blue-green with the summer's crop, changing to a gold brown as the autumn comes on. The flow, as far as it can be noted, occurs twice a year, first from one pole, then from the other; it advances down the latitudes with a regular speed of 52 miles a day.

The canals are held to be narrow belts from 10 to 20 miles wide on the average. They form a closely reticulated system, characterized by straight lines and junctions, which, Professor Lowell maintains, puts the hypothesis of natural origin altogether out of the question.

One of the most remarkable features of the canals is that—in complete accordance with the theory—some of them appear to be double. For some time the canals were figured as they presented themselves to the telescopic observer. By some it was objected that the lines might be illusions of vision. But in the past few months Professor Lowell has had the satisfaction of obtaining photographs of the planet even better than those of two years ago, which amply confirm the appearances previously shown in his drawings.

The new evidence consists of two sets of pictures obtained by himself and Mr. Lampland at Flagstaff Observatory, and by Mr. E. C. Slipher at Alianza, in Chile, South America. The expedition to the Andes, led by Professor Todd, was organized by the Lowell Observatory. E. C. Slipher, one of the scientific experts of the observatory, accompanied the expedition, took with him apparatus devised by Mr. Lampland, and also availed himself, in the actual work of photographing Mars, of Mr. Lampland's suggestions as to the method. All the Mars work in South America was done by him.

The results achieved at Alianza, where at an elevation of about 4,000 feet the air is unusually steady, proved both remarkable and very interesting. Previously to this year it had been possible to show only single lines for the canals of Mars, but the plates taken at Flagstaff first and then at Alianza plainly bring out the doubling of some of the canals. It is regarded as an event in the history of the application of photography to observational astronomy that the first picture of a double canal on Mars—that of "Gihon"—was made at Flagstaff and then again in South America, under the auspices and direction of the Lowell Observatory.

All the photographs taken by Mr. Lampland and by Professor Lowell at Flagstaff, as well as the pictures obtained at Alianza by Mr. Slipher, being of the same region of the planet in each case, show complete agreement with the drawings of the planet hitherto made.

CORNELL AGAIN WALKS OFF WITH INTER- COLLEGIATE CROSS COUNTRY CHAMPIONSHIP.

TECHNOLOGY COULD ONLY LAND SEVENTH PLACE, ONE POINT BEHIND COLUMBIA
AND FOUR AHEAD OF PRINCETON.

Haskins of Pennsy Takes Individual
Honors and Breaks Record.

(By D. C. McMurtrie.)

PRINCETON, N. J., Nov. 27.—For the eighth time in nine years, Cornell came out victorious in the intercollegiate cross country race here today. At no time was the outcome of the race in doubt and the Ithacans won with little effort. Six of Cornell's men finished among the first thirteen out of a field of sixty-eight starters, giving the Ithaca university the small total of 39 points.

Pennsylvania repeated the story of last year's race by taking the individual

Tech's Bad Showing Due to Lack of
Training.

(By D. C. McMurtrie.)

PRINCETON, N. J., Nov. 27.—Beaten by the superior training and the larger experience of their opponents, Technology's representatives in the intercollegiate cross-country race here today secured seventh place in the team score for the Institute. R. Ellis, 1909, and J. N. Stephenson, 1909, furnished a big surprise by taking 24th and 25th places.

Technology was hardly a dangerous factor at any time in the race. Lack of previous experience, lack of that endurance which comes only from long and continued running, were the factors which caused the Institute's bad showing.

That this is true is shown by the fact that the two men who finished first and second, respectively, for Tech were the men who had trained the longest and the most consistently. Moreover, only three of the eight men on the team were members of last year's team.

Ellis, one of these three men, trained consistently last season, and did so again this year. Stephenson has been training hard for three years, and the result of that training was shown in the trials for the team, and again here today.

Callaway, captain of last year's team, did not come out until late this season, owing to the injury to his ankle which he suffered last season, and he not only was not in correct training, but he was forced to drop out of the race at the end of the second mile because of a recurrence of the old trouble with his ankle and knee.

The other man from last year's squad, Capt. Howland, has not been in good training all season, but nevertheless ran a gammy race today. Gimson, like



CAPT. H. H. HOWLAND

championship, and the second place for team honors with 61 points. Plodding through mud and water until he was besmeared from head to foot, Guy Haskins, Pennsy's fleet runner, finished first, running in superb form and breaking the tape fully 50 yards ahead of the second man.

Besides getting the individual honors, Haskins also shattered the time record for the course by over 19 seconds, the time of the race today being 35m 9 1-5s.

In the team championship Yale won third place with a score of 135. None of the Yale runners did particularly well, but the average of the team's work was good.

Syracuse furnished the surprise of the day by walking away with fourth place with a score of 173 points. This is the first year that Syracuse has entered a team in the race, and the achievement of "Tom" Keane is all the more remarkable on that account.

Fifth place went to Harvard with 182. Columbia finished sixth with 227, and only one point behind came Technology. Princeton had won both from Columbia and from Yale in dual runs earlier in the season, but the best the New Jersey men could do today was 231 points.

The day was perfect for the race, but the condition of the course was very poor. A heavy rain the day before had made the clay ground very sticky and the teams had to take extraordinary precautions to keep the running shoes from coming off in the mud. The course was slightly different from the one used last year, but was about the same length, 6 1-2 miles.

The start was made in a great puddle of water, and the men went off in a splash, fighting for the lead. The line at the start stretched out for 50 yards, but at the first hill the men had become well bunched. Throughout the first lap the runners held well together as no one was able to secure any considerable lead. The four front men, Ha'stead and Colpitts of Cornell, Whitey of Princeton, and Haskins of Pennsylvania were running nearly abreast.

(Continued on page 3.)

SOCIETY OF ARTS ORGANIZED TO IN- VESTIGATE PROGRESS.

PRES. ROGERS PLACED IT FIRST IN HIS
PLAN FOR THE INSTITUTE.

N. L. Cheney Will Speak December 5 on
Refrigeration.

In the "Objects and Plans of an Institute of Technology," published in 1861, President William Barton Rogers proposed to establish an institution to be called the Massachusetts Institute of Technology, having the triple organization of a society of arts, a museum of arts, and a school of industrial science.

Thus the Society of Arts was placed first in the plan of the Institute, and after the Institute was founded it was the most important of the three organizations. In the records of the society at that time the statement was always made, "Meeting of the Institute of Technology as the Society of Arts."

It elected a committee called the "Government," which was the governing body of the Institute, corresponding to the present Corporation. This committee met down town and gradually became independent of the society, re-electing itself at the expiration of its term.

Finally it was found that this self perpetuation was illegal. So another charter was secured from the State of Massachusetts legalizing the past actions of the Government and vesting the governing power in the Corporation.

At a meeting of the Society of Arts, Nov. 10, 1881, President Rogers said in the course of his introduction of General Walker to the public as President of the Institute and of the Society:—

"The Society of Arts has steadily performed good work, as is evinced by the character of the records which it can exhibit. It might have prospered more rapidly and have attained to what might have been called magnificent proportions, relatively speaking, had it not abstained with conscientious care from all exhibitions which might have the taint of commercial recommendation."

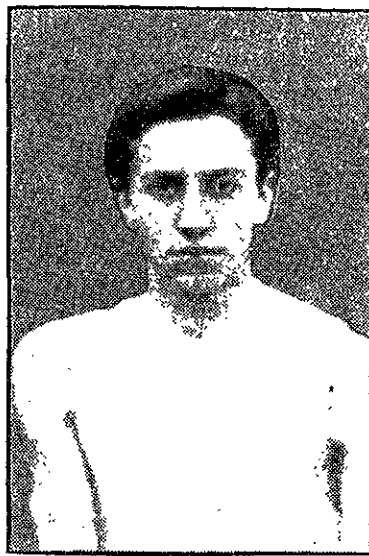
"It has carefully and sedulously abstained from these, and hence to-day it maintains its pure reputation as an institution for the promotion of mechanical science and the useful arts without any reference whatsoever to the mercantile interests of any of the individuals representing the Corporation."

"This is something to be said to its credit, because those who have been with me in this matter know how many have been the inducements, how many have been the temptations and seductions presented to deviate from this course of pure scientific and educational rectitude, and in no case has such a deviation, one hair's breadth, been ever permitted."

"Now, gentlemen, we have attained a point in the growth of the Institute which seems to demand a corresponding expansion in this department of the Institute. It cannot be severed from the Institute of Technology under any circumstances. It is properly growing, and I trust its future growth will justify the hopes that have been entertained in the early part of its history."

President Rogers organized the Society of Arts "for the investigation of the progress made in the industrial arts." It was proposed that the Institute in this character should promote scientific research by the exhibition at its meetings of mechanical inventions and new industrial processes. Also the society was to found a journal to advance the interests of the industrial arts and of education.

So the society, twice each month, invites some man prominent in the technical world to speak before it. These meetings are open to the public. The society has met with some difficulty in the publication of scientific discoveries because investigators generally prefer to publish their results in journals devoted to the sciences to which they appertain.



R. ELLIS

Callaway, had not been out long enough to get into training, while Batchelder and MacCreddie have not yet come to the limits of their possibilities. McCarthy did not come up to his standard because it was the first big race in which he had ever ran.

In the race today throughout the first three miles, Tech's men held well together, as the order in which they passed the mark will show: Ellis 21; Stephenson 31; Batchelder 36; MacCreddie 37; Gimson 41; Howland 44; and McCarthy 49. Callaway had been forced to drop out at the end of the second mile.

Ellis was the first Tech man to finish, having kept up a steady pace throughout the 6 1-2 miles. He was in 24th place, only 2m. 34 4-5s. behind Haskins. Stephenson followed him over the line one second behind.

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Saturday, November 30, 1907.

The plans of THE TECH to publish a regular issue yesterday were frustrated by the refusal of the engravers' and printers' unions to work on Thanksgiving Day. Heretofore, the Friday issue of THE TECH has been omitted.

MAIN REQUISITE IS EFFICIENCY.

"Not considered a fit man to represent the Institute" is becoming a worn-out reason for opposing the election of a candidate to an athletic managership. "He is fit to represent Technology" has come to be the only reason advanced to uphold the candidacy of certain men. The candidate's real ability and knowledge of the sport he is to conduct seems not to be considered.

These arguments, for and against, have been advanced again and again. A striking case was brought up in the election of the assistant track manager in the spring of 1906. Very quietly these arguments were advanced in the election of the track manager this year. But more flagrant cases were brought up in the election of the fencing manager and of the assistant cross country manager in the meeting of the Athletic Association last Monday.

The assistant track manager in 1906 proved an extremely efficient man when he became manager. He was probably superior to the defeated candidate in executive ability and was freer to do justice to the work. Yet the latter worked as assistant manager throughout the track season, did an immense amount of work, was said by the manager over him to be efficient, but designated as "not fit to represent Technology": in fact, it was said that he was a "mucker."

Although the selection to the track managership of a man absolutely without training or knowledge in track work turned out well, it was a dangerous experiment, one that has proved disastrous in previous track seasons.

"Too much energy" also seems to be an argument against some candidates for a managership, for this was advanced against the candidate for track manager this fall. The men competing against him for the position were most lethargic. This one man had shown his ability, efficiency, and energy; why there was any question about his election seems indeed strange.

When the opposition to him was analyzed, it was found that he was too energetic, too efficient, not popular, not "fit to represent Technology," not a Junior. This last argument was advanced because an efficient man should not hold the position two years. "There should be rotation in office."

Last year the fencing managership went begging, was offered about here and there by the Fencing Team on a silver platter. Evidently the joys attendant to the trip to New York has heightened the value of the office, for there has been a great scramble this fall, and much acrimonious talk.

At the opening of the season a year ago, several men acceptable to the Fencing Team were offered the fencing managership, one or two turned the offer down, another accepted but had to give it up, and at last a man was found who took it after much urging and with great unwillingness. Although he cared little for the place and had never had any real interest in the sport, he did his very best.

During the season last year, a Sophomore tried for the assistant managership. He was allowed to do some work,

how much it is hard to say, because of varying statements. At one time the manager states that the candidate did conscientious work, but later says that he did not put up posters well. Last year's captain tells the candidate at very near the close of the season that he (the candidate) will undoubtedly be elected manager. This is now denied. It is known that the first statements are true.

In order to defeat this very undesirable candidate, the Fencing Team goes to great measures. Early in the fall a popular man, one who is thought to be "fit to represent the Institute," one who would grace the intercollegiate meeting in New York, is urged by the Fencing Team to come out. There is no thought of competition. However, nothing will be said as to this man's ability, for he left school.

Then the position is thrown open to competition. A scramble comes. Mention is made of the candidate who worked in the previous season. Then comes a communication that, if this impossible fellow is elected, the Fencing Team will resign, that the man is not "fit to represent Technology."

After a competition which consisted of handing in names to the secretary of the Athletic Association, the election came. The strongest candidate was a man who had previously nothing whatever to do with fencing. This candidate was and is a crack sprinter, who says since he won his T, he has not had time to run, except on the relay team. He has, however, had time to play football, work on Technique, and now to take up the fencing managership.

In the case of the cross country managership, the man considered "fit to represent Technology" had never been interested in cross country work until this fall, but had played football. The other candidate had been connected with cross country running since his first year at the Institute, is chase captain, is a hustler, is efficient. Yet the first candidate was recommended.

This spirit of opposing efficient, capable men is a reflection of the spirit found in municipal politics. It is the popular man that seems to be best choice, regardless of ability. This spirit is not confined to any one quarter, nor to any one class at the Institute. It could be seen in the election of the assistant track manager last year, in which the less efficient man would have won, had not the better man, the man who had done the best work in competition, had plenty of friends, there by request, at the meeting. And all this in spite of an overwhelmingly favorable detailed recommendation. The new Athletic Association was formed to prevent a recurrence of this, but it seems to have intensified the fault.

It will be well for all Tech men to realize throughout their course at the Institute that in the business and engineering world, efficiency and character count the most and come first. One is almost useless without the other, but the first must always be there. Last of all is considered the man's personal manner, whether he wears a soft or starched shirt, whether he looks best in overalls or evening dress.

At the Institute character is recognized to a certain extent, but not efficiency. Too much stress is laid, when selecting managers, on the superficial. It should matter little whether a manager can be a good fellow at a yearly meeting of some intercollegiate association, but it should matter a good deal whether that manager is capable and earnest in the work for the team at the Institute. The opposite seems true.

Many have lost sight of the fact that if a man is efficient he will in great part have character and will be respected anywhere.

Technology cannot expect to have college sports in the managerial positions. This type does not take kindly to the Institute curriculum. There are plenty of true sports at the Institute, but sad to say, they do not long for managerial honors. There are plenty of cheap sports who are always striving hard to have their name connected with some office or other. The imitation is being passed for the real.

For the good of Technology teams, for the good of Institute athletics, efficient men must be elected to athletic managerships. Men who know the duties of a manager's office, know the sport they are to conduct, know the members of the team intimately, who are earnestly interested in their teams must be elected managers. Efficiency, capability, ability, and earnestness must be the requisites, not alone that "he is fit to represent Technology."

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CORNELL AGAIN.

(Continued from page 1.)

In the last three miles the leaders began to pull away considerably and the pace was set at a fast clip. Whitely was leading the field by a clear 30 yards over Haskins and the next two runners, Halstead and Colpitts, were far in the rear.

About a quarter of a mile from the finish, however, Whitely who had been ill the week before, almost collapsed and was hardly able to finish. When the runners hove into sight on the final stretch, Haskins was leading by a narrow margin.

A good distance behind the leaders jogged Halstead and Colpitts, the two Cornell runners. Two hundred yards from the stretch Whitely seemed to go all to pieces and a timely sprint gave Haskins a 40-yard lead, which he held to the tape.

Colpitts and Holstead both forged ahead of Whitely a few yards from the finish the former slightly ahead of his teammate. Two more Cornell men, Trube and Young, got fifth and sixth places.

The summary:—
Name and College.

	Time.
	M. S.
1 G. Haskins, Pennsylvania	35 09 1-5
2 Halstead, Cornell	35 21
3 Colpitts, Cornell	35 22
4 Whitely, Princeton	35 32
5 Trube, Cornell	36 07
6 Young, Cornell	36 15
7 L. R. Jones, Pennsylvania	36 18
8 Quigley, Pennsylvania	36 19
9 Boyle, Pennsylvania	36 24 2-5
10 Hunger, Cornell	36 34
11 Stube, Syracuse	36 38
12 Spitzer, Yale	36 51
13 Seelye, Cornell	36 54
14 Reynolds, Yale	36 55
15 Call, Syracuse	36 56
16 Dole, Harvard	37 01
17 Jack, Pennsylvania	37 10
18 Vilas, Yale	37 17
19 Moore, Pennsylvania	37 18
20 Haskell, Yale	37 21
21 Lemon, Cornell	37 22
22 Crosby, Harvard	37 37
23 Zink, Columbia	37 42
24 Ellis, Tech	37 44
25 Stephenson, Tech	37 45
26 Atwood, Cornell	37 46
27 Carter, Harvard	38 01
28 Lanier, Harvard	38 23
29 Marble, Syracuse	38 24
30 Benjamin, Syracuse	38 28
31 Howland, Tech	38 32
32 Batchelder, Tech	38 34

33 Morris, Pennsylvania	38 35
34 Ralph, Princeton	38 38
35 Converse, Yale	38 39
36 Luther, Yale	38 43
37 Kudlich, Columbia	38 44
38 Wheeler, Columbia	38 49
39 Cullings, Syracuse	38 51
40 O'Brien, Columbia	38 53
41 Kistler, Columbia	38 55
42 Hoyt, Harvard	38 57
43 Gunn, Pennsylvania	39 03
44 Glover, Princeton	39 04
45 Campbell, Princeton	39 05



C. L. BATCHELDER

46 Vernon, Princeton	39 14
47 Whitney, Harvard	39 25
48 Saunders, Columbia	39 30
49 Wood, Syracuse	39 32
50 Eastman, Columbia	39 33
51 M. D. Smith, Columbia	39 42
52 Souder, Harvard	39 47
53 Kennedy, Columbia	39 49

No further times taken.

54. Field, Yale; 55. Gimson, Tech; 56. Woodman, Harvard; 56. Judg, Syracuse; 58. Chapman, Princeton; 59. Hirsasoff, Yale; 60. Kirkpatrick, Princeton; 61. MacCreddie, Tech; 62. Lute, Yale; 63. McGee, Princeton; 64. McCarthy, Tech.
Team score—First, Cornell, 39; second, Pennsylvania, 61; third, Yale, 135; fourth, Syracuse, 173; fifth, Harvard, 182; sixth, Columbia, 227; seventh, Technology, 228; eighth, Princeton, 231.

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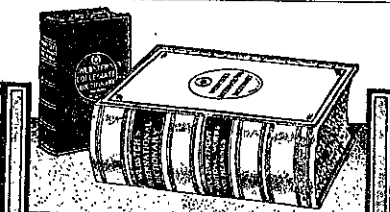
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CALENDAR.

CALENDAR.

Saturday, Nov. 30, 1907.

1.52 P. M. Cross-Country Squad Leaves Back Bay Station for Handicap Race at Highland Station.

Monday, December 2, 1907.

4.00 P. M. Maadolin Club Rehearsal in 33 Rogers.

4.00 P. M. Glee Club Rehearsal at the Union.

8.00 P. M. Fencing Club Exhibition at 22 St. Botolph St.

FACULTY NOTICES.

FOUND ARTICLES.—Numerous articles belonging to students have been found in various rooms of the Institute. The same may be obtained by the respective owners if they will apply at the Bursar's office.

SECOND YEAR.—Students of Second Year English, having the subject twice a week (Courses 1, 2, 11 and 13), will be excused from the final examination in all cases in which their work during the term warrants a mark as high as P plus.

CLASS IN TOPOGRAPHIC GEOLOGY.—It has been decided to omit the weekly lecture in this course and to use the hour for laboratory work for one section of the class. The hours for section work are the following: Monday, 12 to 1; Tuesday, 11 to 12; Thursday, 11 to 12; Friday, 12 to 1. Each member of the class is requested to mail or hand in a card to Professor Daly at Pierce 10a, showing all the hours available for this laboratory work. The class will then be divided into sections, which will be listed on the bulletin boards today.

NOTICES.

1909.—The 1909 Class Picture will be taken on Rogers steps, Tuesday, Dec. 3, at 1 P. M., immediately after the political economy lecture.

BANJO CLUB.—There will be an important rehearsal of the Banjo Club on Tuesday, Dec. 3. Every member of the club is expected to be present and to know his music.

LYRICS.—All lyrics for the Tech Show 1908 must be in by one o'clock Saturday, Dec. 21. Men who wish to compete may receive a synopsis of songs suggested by applying to the stage manager at the Cage. Notice as to music for the lyrics will appear later.

EXHIBITION.—Fencing Club will give its monthly exhibitions Monday evening, 8.30 P. M., at 22 St. Botolph street. Freshman, Sophomore and Junior teams will compete. It is expected that the fair sex will be there in full force. Admission tickets may be obtained free by leaving note at Cage for N. C. Grubnau, Secretary.

CLASSIFIED ADS.

Advertisements of this kind under different classifications are inserted at the rate of five cents a line, averaging six words to a line, payable in advance.

WANTED AT ONCE.—Agents for the Red Dwarf Ink Pencil. Apply any noon at Room 30, Rogers.

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